

*REMARKS/ARGUMENTS**Present Invention and Pending Claims*

The present invention relates to a polyester composition and a polyester packaging material made therefrom. Claims 1-6, 8-16, 18, 19, 21, 22, 24, 25, 27, 28, 30, 31, and 33-38 are pending.

Amendments to the Claims

Claims 1, 2, and 4 have been amended to recite the content of the partially aromatic polyamide as supported by the originally filed claims. Claims 1, 2, and 4 also have been amended to recite that the fine powder content of the thermoplastic polyester is 1,000 ppm or less, as supported by the specification at, for example, page 22, line 17, through page 23, line 12. Claims 7, 17, 20, 23, 26, 29, and 32 have been canceled. New claims 33-35 have been added and are supported by the specification at, for example, Examples 14 and 15. New claims 36-38 have been added and are supported by the specification at, for example, page 41, line 21, through page 42, line 6. No new matter has been added by way of these amendments.

Summary of the Office Action

Claims 1-32 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly lacking written description.

Claims 1-6, 8-16, 18, 19, 21, 22, 24, 25, 27, 28, 30, and 31 are rejected under 35 U.S.C. § 103(a) as obvious over EP 1 239 008 (Takashima et al.) (“the ‘008 application”) or U.S. Patent 6,733,853 (Takashima et al.) (“the ‘853 patent”).

Claims 7, 17, 20, 23, 26, 29, and 32 are rejected under 35 U.S.C. § 103(a) as obvious over either the ‘008 application or the ‘853 patent in combination with U.S. Patent 7,022,390 (Odorisio et al.).

Reconsideration of the pending claims is hereby requested.

Discussion of the Written Description Rejection

Claims 1-32 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly lacking written description.

To advance prosecution, and not in acquiescence of the rejection, independent claims 1, 2, and 4 have been amended to recite a polyamide content as supported by the originally filed claims. In view of this amendment, it is submitted that the written description rejection has been rendered moot.

*Discussion of the Obviousness Rejections**A. The '008 Application and the '853 Patent*

Claims 1-6, 8-16, 18, 19, 21, 22, 24, 25, 27, 28, 30, and 31 allegedly are obvious over each of the '008 application and the '853 patent. According to the Examiner, the cited references disclose polyester-based resin compositions comprising a blend of 3-40% by mass of a polyamide resin (A) and 60-97% by mass of a polyester (B). The concentration of the alkali-metal-containing phosphorus compound reportedly is 200 ppm or less in the Takashima et al. references. The Takashima et al. references also allegedly disclose the amount of antimony atom to be 50-400 ppm.

The Examiner contends that the claimed range that extends up to 3 parts by weight of the polyamide component is *prima facie* obvious over the disclosure of 3.1 parts by weight in the Takashima et al. references. In particular, in view of the disclosure of 3.1 parts by weight in the prior art, one of ordinary skill in the art allegedly would have had a reasonable expectation of success to use 3 parts by weight of the same component in the absence of surprising or unexpected results.

The pending claims have been amended to recite that the content of the partially aromatic polyamide is 0.1 to 50 parts by weight (independent claims 1 and 2) or 0.01 to 30 parts by weight (independent claim 4) per 100 parts by weight of the thermoplastic polyester.

In addition, the pending claims have been amended to recite that the fine powder content of the thermoplastic polyester is 1,000 ppm or less. Neither of the Takashima et al. references discloses a polyester composition comprising a fine content of 1,000 ppm or less.

Moreover, the Takashima et al. references do not teach or suggest a benefit of providing a polyester composition with a fine content of 1,000 ppm or less. Thus, without such a disclosure or a suggestion of providing a polyester composition with a fine content of 1,000 ppm or less, it cannot be said that the subject matter of the pending claims is anticipated by or obvious over the Takashima et al. references.

In contrast, Applicants have surprisingly discovered that when the fine content is relatively high (e.g., more than 1,000 ppm), the transparency of a molded article based on the inventive polyester composition is poor. Table 1 in the specification describes the fine content in the thermoplastic polyesters of the examples. The effect on the transparency of a molded article formed from a thermoplastic polyester with varying fine content is seen in Example 16 and Comparative Example 12 (Table 7). In particular, inventive Example 16 is prepared from thermoplastic polyester 3A, which has a fine content of 80 ppm (Tables 1 and 7). A blow-molded article prepared from this polyester has good transparency with no observation of foreign matter (e.g., non-melted matter). In contrast, Comparative Example 12 is prepared from thermoplastic 3C, which has a fine content of 5,000 ppm (Tables 1 and 7). A blow-molded article prepared from this polyester has poor transparency.

Thus, it can be seen that controlling the fine content in the thermoplastic polyester component can provide an unexpected improvement in a resulting molded article. The Takashima et al. references do not recognize this surprising benefit. As such, upon reading the Takashima et al. references, one of ordinary skill in the art would not be motivated to modify the disclosures in the precise manner necessary to arrive at the composition of the pending claims. Accordingly, Applicants submit that the amended pending claims define subject matter that is both novel and unobvious over the cited references, and the obviousness rejections should be withdrawn.

In addition to requiring a fine content of 1,000 ppm or less, new claims 33-38 recite that the content of the partially aromatic polyamide is 3 parts by weight (claims 33-35) or an upper limit of 2 parts by weight (claims 36-38) per 100 parts by weight of the thermoplastic polyester. As previously discussed, the Takashima et al. references disclose a composition comprising 3.1 parts by weight of polyamide per 100 parts by weight of the thermoplastic polyester. The Takashima et al. references teach away from adding amounts *lower* than 3.1

parts by weight, since it was found that amounts higher than 3.1% by mass (e.g., 5-35% by mass) improved the gas barrier properties and stabilized the moldability of the resin composition ('008 application, para. 0027; '853 patent, col. 6, lines 41-46).

Applicants have surprisingly found that compositions comprising both a fine content of 1,000 ppm or less and a polyamide content of 3 parts by weight or up to 2 parts by weight per 100 parts by weight of the thermoplastic polyester provide excellent results in both transparency and flavor retention (i.e., the sensory test) in blow-molded articles. See, for example, Examples 14 and 15 (polyamide content of 3 parts by weight) and Examples 1, 7, and 13 (polyamide content of up to 2 parts by weight). For example, only the blow-molded article in Example 1, compared to Examples 2-6 and Comparative Examples 1-5, received a rating of "AA" in *both* transparency and flavor retention. See, e.g., Tables 3 and 4 of the specification of the present application. Similarly, the blow-molded article in Example 7, compared to Examples 8 and 9 and Comparative Example 6-8, received a rating of "AA" in *both* transparency and flavor retention. See, e.g., Table 5 of the specification of the present application.

The Takashima et al. references simply do not recognize or appreciate a benefit of providing a composition with the polyamide contents recited in claims 33-38, as discovered by Applicants. Moreover, as discussed above, the Takashima et al. references lead one away from providing a composition with the claimed amount, since improved benefits were observed with polyamide amounts *higher* than 3.1 parts by weight. The Takashima et al. references are silent as to polyamide amounts lower than 3.1 parts by weight. The surprising and unexpected results of providing a polyester composition comprising a polyamide content of 3 parts by weight (claims 33-35) or up to 2 parts by weight (claims 36-38) discovered by Applicants rebut the Examiner's alleged *prima facie* case of obviousness over the disclosure of 3.1 parts by weight in the Takashima et al. references.

In view of the foregoing, Applicants respectfully request that the obviousness rejections over the '008 application and the '853 patent be withdrawn.

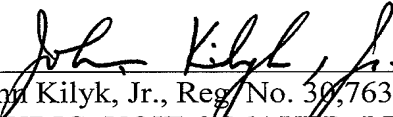
B. The '008 application or the '853 patent in combination with Odorisio et al.

Claims 7, 17, 20, 23, 26, 29, and 32 allegedly are obvious over either the '008 application or the '853 patent in combination in combination with Odorisio et al. In view of the cancellation of claims 7, 17, 20, 23, 26, 29, and 32, this rejection is moot.

Conclusion

Applicants respectfully submit that the patent application is in condition for allowance. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



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